In the Claims

Kindly amend the claims, without prejudice, as follows:

1. (Currently amended) An isolated e[E]ster-group-cleaving enzyme ~~obtainable~~ obtained by culturing the microorganism ~~Thermomonospora fusca~~ *Thermomonospora fusca* in a suitable nutrient medium, ~~optionally~~ in the presence of an inducer.

2. (Currently amended) The isolated e[E]ster -group-cleaving enzyme according to claim 1, wherein the microorganism ~~being~~ is a ~~Thermomonospora fusca~~ *Thermomonospora fusca* strain that has been deposited with the Deutschen Sammlung für Mikroorganismen (German Collection of Microorganisms) under the number DSM 43793.

3. (Currently amended) The isolated e[E]ster -group-cleaving enzyme according to claim 1, wherein the enzyme ~~being~~ is isolated from the nutrient medium by obtaining an enzyme-containing culture supernatant from the nutrient medium, ~~which supernatant may optionally be concentrated,~~ and

purifying the enzyme by chromatography, ~~especially by ion exchange chromatography and/or hydrophobic interaction chromatography.~~

4. (Currently amended) The isolated e[E]ster -group-cleaving enzyme according to claim 1, wherein the enzyme ~~being characterised by the following parameters:~~ has a molecular weight of 27400 d ~~(determined by SDS gel electrophoresis) or~~ to 28200 d ~~(calculated on the basis of the amino acid sequence)~~,

an optimum temperature of ~~optimum/range~~ 65°C ~~(30-80°C)~~, a functional temperature range of 30-80°C, temperature stability of 70°C/30 min, an optimum pH ~~optimum/range:~~ of 6-7 ~~(4->8)~~, a functional pH range of 4->8, and an isoelectric point of 6.4.

5. (Currently amended) The isolated e[E]ster -group-cleaving enzyme according to claim 1, wherein the enzyme has the amino acid sequence of SEQ ID NO: 1 or wherein the enzyme is a mutant or derivative of SEQ ID NO: 1 resulting from substitution of amino acids of SEQ ID NO: 1, insertion of amino acids into SEQ ID NO: 1 or deletion of amino acids ~~of~~ from SEQ ID NO: 1, and wherein said mutant or derivative has ester-group-cleaving enzyme activity.

6. (Currently amended) ~~Synthetic~~ A synthetic peptide or protein ~~having~~ comprising the amino acid sequence of the ester-group-cleaving enzyme according to claim 5 or a part of the sequence thereof.

7. (Currently amended) ~~Polyclonal~~ A polyclonal antibody directed specifically against an ester-group-cleaving enzyme according to claim 1, ~~or against a synthetic peptide or protein.~~

8. (Currently amended) ~~Monoclonal~~ A monoclonal antibody directed specifically against an ester-group-cleaving enzyme according to claim 1 ~~or against a synthetic peptide or protein~~.

9. (Currently amended) ~~Hybridoma~~ A hybridoma cell that produces a monoclonal antibody according to claim 8.

10. (Currently Amended) An e[E]ster-group-cleaving composition that comprises an ester-group-cleaving enzyme according to claim 1 ~~and/or a synthetic peptide or protein~~ and ~~optionally~~ at least one additional component comprised of additional enzymes, stabilisers, ~~suitable~~ surface-active substances ~~and/~~or ~~suitable~~ organic solvents.

11. (Currrently amended) The e[E]ster-group-cleaving composition according to claim 10, wherein the additional enzymes are selected from the group consisting of hydrolases, ~~especially~~ esterases, proteases, cutinases, lipases, phospho-lipases and lysophospholipases.

12. (Currently Amended) The e[E]ster-group-cleaving composition according to claim 11, wherein the hydrolases ~~originate~~ are from microorganisms selected from the group consisting of ~~Pseudomonas sp., Rizomucor miehei, Candida cylindracea, Candida antartica, Aspergillus niger, Chromobacterium viscosum, Commamonas acidovorans, Rhizopus arrhizus and Rhizopus delamar.~~ *Pseudomonas* sp., *Rizomucor miehei, Candida cylindracea, Candida antartica, Aspergillus niger, Chromobacterium viscosum, Commamonas acidovorans, Rhizopus arrhizus* and *Rhizopus delama.*

13. (Currently Amended) ~~Use of~~ A method for the degradation of an ester-group-containing macromolecular compound, comprising the steps of:

a) providing an ester-group-containing macromolecular compound;

b) providing an ester-group-cleaving enzyme according to claim 1; and

c) incubating said ester-group-containing macromolecular compound and said ester-group-cleaving enzyme for a suitable time and at a suitable temperature,

such that the ester-group-containing macromolecular compound is degraded ~~or of a synthetic peptide or protein or of an ester-group-cleaving composition for the degradation of ester-group-containing low-molecular-weight and/or macromolecular synthetic or natural compounds~~.

14. (Currently amended) ~~Use~~ The method according to claim 13, wherein the ester-group-containing macromolecular compounds are aliphatic, cycloaliphatic, aliphatic-aromatic, partially aromatic, ~~or~~ aromatic polyesters, aromatic ~~or~~ copolyesters, polyesteramides, polyestercarbonates or polyester-urethanes~~, the chain of which may be extended and which may be branched or crosslinked~~.

15. (Currently amended) ~~Use~~ The method according to claim 14, wherein the ester-group-containing macromolecular compounds form copolymers, mixtures and blends, composites, laminates or adhesive bonds with other materials.

16. (Previously Presented) A genetically modified microorganism producing, in culture, a protein having the amino acid sequence of SEQ ID NO 1.

17. (Previously Presented) A genetically modified microorganism according to claim 16 wherein the microorganism is a *Thermomonospora fusca* strain.

18. (New) The isolated ester-group cleaving enzyme according to claim 3, wherein the culture supernatant is concentrated prior to purifying the enzyme by chromatography.

19. (New) The isolated ester group cleaving enzyme according to claim 3, wherein said chromatography method comprises ion exchange chromatography or hydrophobic interaction chromatography.

20. (New) A polyclonal antibody directed specifically against an ester-group-cleaving enzyme according to claim 5.

21. (New) A polyclonal antibody directed specifically against a synthetic peptide or protein according to claim 6.

22. (New) A monoclonal antibody directed specifically against an ester-group-cleaving enzyme according to claim 5.

23. (New) A monoclonal antibody directed specifically against a synthetic peptide or protein according to claim 6.

24. (New) A hybridoma cell that produces a monoclonal antibody according to claim 22.

25. (New) A hybridoma cell that produces a monoclonal antibody according to claim 23.

26. (New) An ester-group-cleaving composition that comprises an ester-group-cleaving enzyme according to claim 5 and at least one additional component comprised of additional enzymes, stabilisers, surface-active substances or organic solvents.

27. (New) An ester-group-cleaving composition that comprises a synthetic peptide or protein according to claim 6 and at least one additional component comprised of additional enzymes, stabilisers, surface-active substances or organic solvents.

28. (New) The ester-group-cleaving composition according to claim 27, wherein the additional enzymes are selected from the group consisting of hydrolases, esterases, proteases, cutinases, lipases, phospho-lipases and lysophospholipases.

29. (New) The ester-group-cleaving composition according to claim 28, wherein the additional enzymes are selected from the group consisting of hydrolases, esterases, proteases, cutinases, lipases, phospho-lipases and lysophospholipases.

30. (New) A method for the degradation of an ester-group-containing macromolecular compound, comprising the steps of:

a) providing an ester-group-containing macromolecular compound;

b) providing a synthetic peptide or protein according to claim 6; and

c) incubating said ester-group-containing macromolecular compound and said synthetic peptide or protein for a suitable time and at a suitable temperature, such that the ester-group-containing macromolecular compound is degraded.

31. (New) The method according to claim 30, wherein the ester-group-containing macromolecular compounds are aliphatic, cycloaliphatic, aliphatic-aromatic, partially aromatic, aromatic polyesters, aromatic copolyesters, polyesteramides, polyestercarbonates or polyester-urethanes.

32. (New) The method according to claim 31, wherein the ester-group-containing macromolecular compounds form copolymers, mixtures an blends, composites, laminates or adhesive bonds with other materials.

In the Drawings:

Kindly replace the previously filed drawing for Figure 7 with the enclosed replacement drawing for Figure 7.